NAVIGATION SYSTEM

Contents, Accessories, and Laser

Accessories

Please contact an Authorized Mazda Repairer if you are missing any of the following accessories.



- Map Disc
- Owner's Manual

CAUTION:

THIS PRODUCT IS A CLASS I LASER PRODUCT. HOWEVER THIS PRODUCT USES A VISIBLE/INVISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THIS PRODUCT CORRECTLY AS INSTRUCTED. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Laser products:

Wave length: 650 nm

Laser power: No hazardous radiation is emitted with safety protection.

Preparation

Immediate

Advanced

If necessary

Product

Laser Product Contents Safety Information Introduction			Before Use
Screen names and f	unctions		Getting started
Use POI Character Direct Destination	Change (Change Sea Point of interest Memory Point Preset Destination Intersection Phone number Select from map Entry ation Input Maps / Delete Dest	oute Search 16 arch Area) Address Emergency Home Previous Destination Freeway On/Off Ramp Coordinates 22 23 24 tination	
		32	Address Book
Voice Recogn	nition	38	Voice Recognition
		40	Navigation Set Up
Troubleshooting	 Voice Guidance Map Matching Route Guide Verification First 	Positioning Accuracy Route Search54	As necessary

Safety Information

- Read this owner's manual for your Navigation System carefully before using the system. They contain instructions about how to use the system in a safe and effective manner. Mazda assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.
- This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operation. The meanings of the pictographs are explained below. It is important that you fully understand the pictographs and explanations in order to use this manual and the system properly.



Warning

The presence of this Warning symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in severe injury or death.



■ Do not keep your eyes fixed on the monitor screen or operate the system while driving.

Do not change the settings and destination locations while driving. Minimize the time spent on viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before operating the system.

■ Always obey local traffic regulations.

Your guided route may include roads that are not open to vehicles or are closed due to traffic regulations. Comply with the local traffic regulations and take another route.

■ Do not use the unit when it is out of order.

If the unit is out of order (no image, no sound) or in an abnormal state (has foreign matter in it, is exposed to water, is smoking, or smells), then turn it off immediately and consult with an Expert repairer, we recommend an Authorized Mazda Repairer. Using the unit in an out-of-order condition may lead to accidents, fires, or electric shocks.

■ Use the proper power supply.

This product is designed for operation with a negative grounded 12 V DC battery system.

■ Do not disassemble.

Do not disassemble the product or attempt to repair it yourself. If the product needs to be repaired, take it to an Expert repairer, we recommend an Authorized Mazda Repairer.



Caution

The presence of this Caution symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in injury or material damage.



- Do not use the product where it is exposed to water, moisture, or dust.

 Exposure to water, moisture, or dust may lead to smoke, fire, or other damage to the unit.

 Make especially sure that the unit does not get wet in car washes or on rainy days.
- Keep the voice guidance volume at an appropriate level.
 Keep the volume level low enough to be aware of road and traffic conditions while driving.
- Protect the Deck Mechanism.

 Do not insert any foreign objects into the slot of this unit.
- This navigation system is designed use for exclusively in automobiles.

 This navigation system should only be installed in an automobile. Do not install it in a ship, aircraft, or any other vehicles except an automobile. Do not use it detached from the vehicle.
- Do not insert or allow your hand or fingers to be caught in the unit.

 To prevent injury, do not get your hand or fingers caught in moving parts or in the disc slot. Especially watch out for infants.

Operation is subject to the following two conditions;

- (1) this device may not cause interference, and
- (2) this device must accept any interference,

including interference that may cause undesired operation of the device.

Introduction

Use This Product Safety

■ Extremely low or high temperatures may interfere with normal operation
The inside of the vehicle can become very hot or cold when it is parked for extended periods in direct sunlight or in cold places with the engine turned off. The navigation system may not operate normally under such circumstances. Turn off the navigation system until the inside of the vehicle has cooled down or warmed up. If the system does not operate thereafter, consult an Expert repairer, we recommend an Authorized Mazda Repairer.

Navigation System

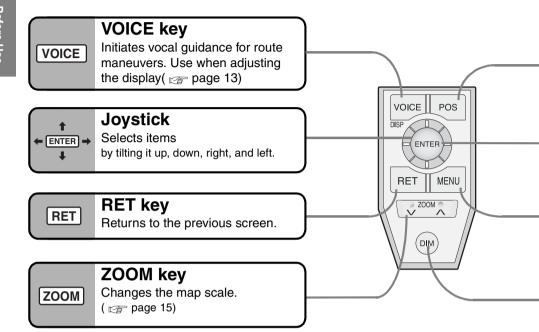
This navigation system utilizes GPS* satellite signals, Speed sensor and Gyrosensor to track and display your vehicle's current position, and to guide you from your starting point to your destination along a calculated route.

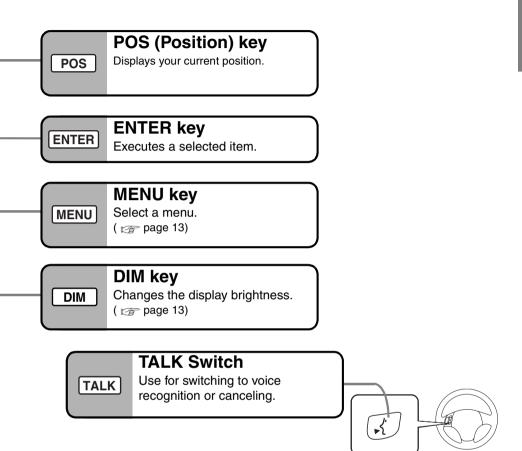
*: GPS (Global Positioning System) is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Defense Department.

Screens

Screens displayed in this manual may differ from those on the actual display.

Names and Functions





Activation

Insert the map disc into the unit to start the Mobile Navigation System.



■ Map Disc

 Refer to "Handling and Care of Map Discs" to know how to handle a map disc (me page 55).

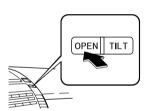
Note

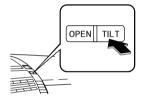
- The map disc cannot be inserted or ejected while the ignition switch is in the OFF position.
- Remember that the battery can run down if the ignition switch is kept in the ON or ACC position for a long time while the engine not running.
- Turn the ignition switch to the ON position and press

 OPEN to open the display.

Note

This display angle can be adjusted by pressing





When the **TILT** is pressed, the display angle changes in stages.

●Press OPEN to close the display.

Insert the map disc with the printed side facing up.



Note

■The main unit is located in the glove box compartment.
■Condensation may form on the optical lens or the map disc inside the unit when the temperature in the vehicle increases in a short time such as when heating the car on a cold day. This condensation may cause malfunctions. If so, unload the map disc and do not operate the unit for approximately 1 hour. Wipe the condensation off the map disc with a soft cloth. If the unit does not operate correctly after 1 hour, consult an Authorized Mazda Dealer.





Read CAUTION carefully, and select Agree and press ENTER.



Most functions are inhibited while the vehicle is in motion.

Please read the handbook for operation instructions.

Always obey traffic regulations.



• The Current Position screen appears.

Note

- You can select the language by select ● and press ENTER. You can also change the selected language using Language Selection. (☐ page 47)

 If 3 minutes elapse without any operation, the display changes automatically to Language Selection. (☐ page 47)
- The CAUTION screen remains on the display unless you select Agree and press ENTER.

Removing the Map Disc

When the ignition switch is in the ACC position and press \triangle (EJECT).





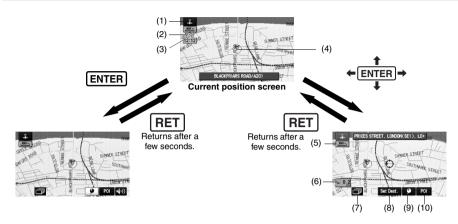
Do not get your hand or fingers caught in moving parts or in the disc slot. This can cause injuries. Children are inquisitive, try to install or remove the map disc without infants looking on.

Buttons on the screen

Select the buttons by using Joystick and press **ENTER**. Colors for unavailable buttons will be pale.

Screen names and functions

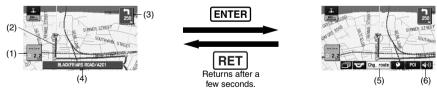
Screens Before Setting Route



- (1) Map Orientation control (page 15)
- (2) GPS (Global Positioning System) marker (page 49)
- (3) Clock
 Clock will be displayed when you set up
 Clock on Navigation Set Up On.
- (4) Vehicle marker
 Shows the current position and direction of your vehicle.
- (5) Scale display
 Displays the scale of the map.
- (6) Distance from current position
 Displays the distance from the current position to the position pointed by ...

- (7) Screen Configuration (page 14)
- 8) Set Destination button The destination or way point will be set at the position pointed by on the scroll screen.
- (9) Store Memory Point button Stores markers on the map.
- (10) POI (Point of Interest) Display button (page 22)

Screens During Route Guidance



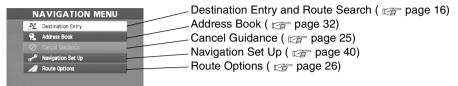
- (1) Distance and Time to Destination display Displays the time* and distance to the destination or way point.
 - Selecting this will display the next and further information on the way point or time and distance to the destination. (* Either required time or estimated time arrival)
- (2) Route display
 Shows the provided route as a thick

blue line.

- (3) Turn Arrow display
 Shows the direction to turn at the next iunction and the distance to the junction.
- (4) Current Road Name Shows the name of the road you are currently driving on.
- (5) Change Route button
 Displays the Route Option menu so that settings for route calculation can be changed.
- (6) Volume button
 Displays the volume adjustment screen.

Menu

Menu appears when pressing MENU.



Screen adjustments and settings

Display Menu screen will be shown when you press VOICE (DISP) and hold.



Display Menu screen will be disappeared when they have been unused during a few seconds.

■ Adjusting the screen quality

Adjusts the screen brightness

Select "BRIGHT", press ENTER and the screen will be brighter when scrolling it to the right, or darker when scrolling it to the left.

Adjusts the screen contrast

Select "CONTRAST", press **ENTER** and the screen will be lighter when scrolling it to the right, or deeper when scrolling it to the left.

Note

- Adjust by scrolling the Joystick to the right and left.
- Restore the adjustment value to the default when selecting "RESET", press ENTER].

■ Clearing the screen

Select "RET", press **ENTER** and the screen will disappear.

The screen will appear again when pressing any buttons.

■ Daytime screen/Night screen

Turning the headlights on swithches the screen from the daytime screen to night screen. Turn on the small lamp to make the screen more visible.

• Alternatively, you can carry out the same operation by using DIM .

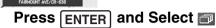
Screen change

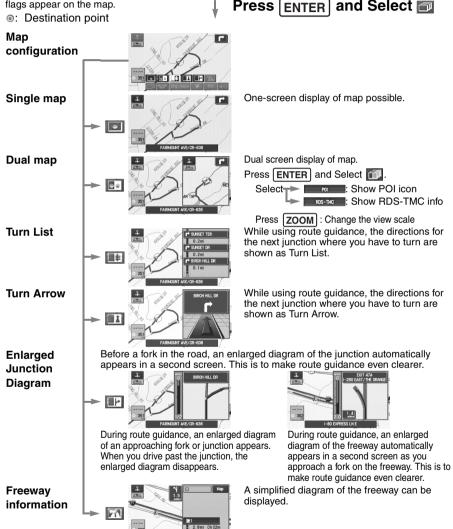
Current position map Route and flags

Shows the current position of your vehicle on the scale selected.

When the route has been set, the blue line represents the route and the following two flags appear on the map.





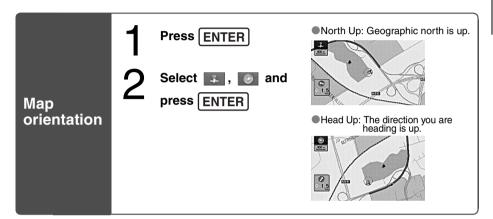


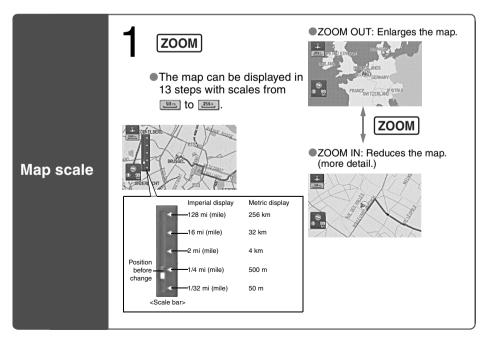
Changing the Map Orientation/Scale



■ Do not keep your eyes fixed on the monitor screen or operate the system while driving

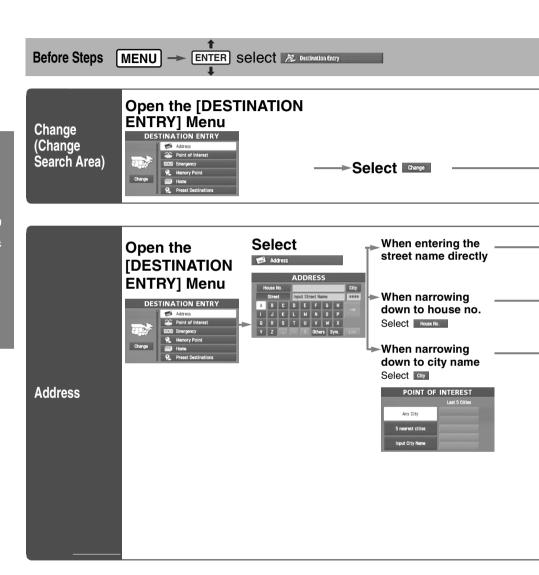
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.





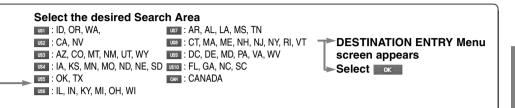
Destination Entry and Route Search

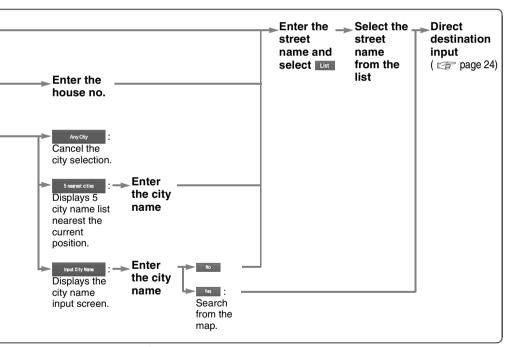
You can set the destination using various methods provided by the system.





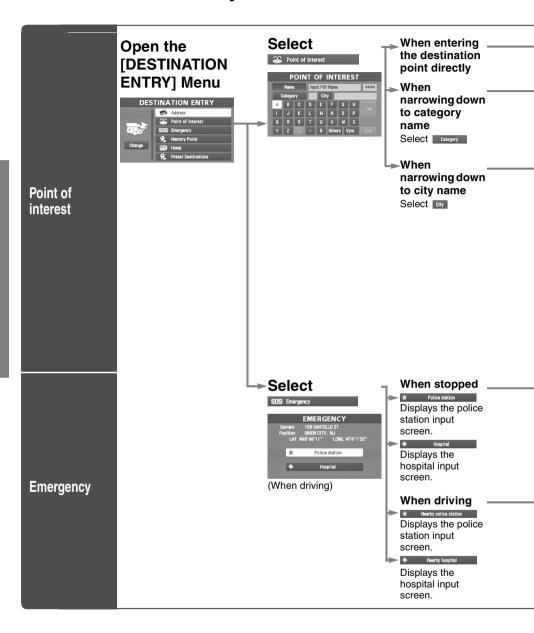
- Do not keep your eyes fixed on the monitor screen or operate the system while driving. Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location before operating the system.
- Route searches with the navigation system can include roads that you can not drive on and roads that you are prohibited from driving on due to traffic regulations. Please comply with the traffic regulations.

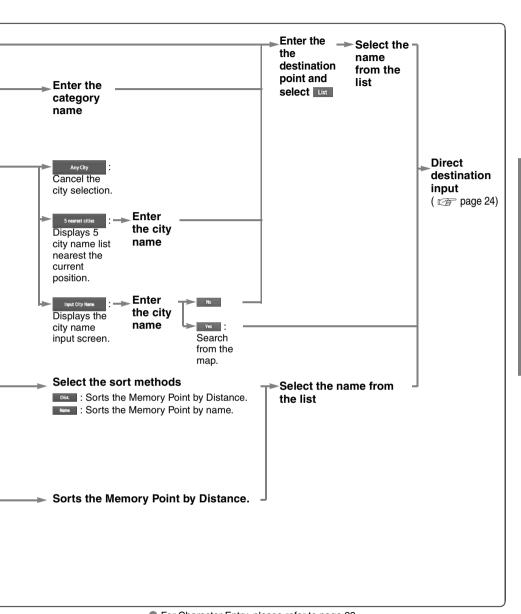




For Character Entry, please refer to page 23.

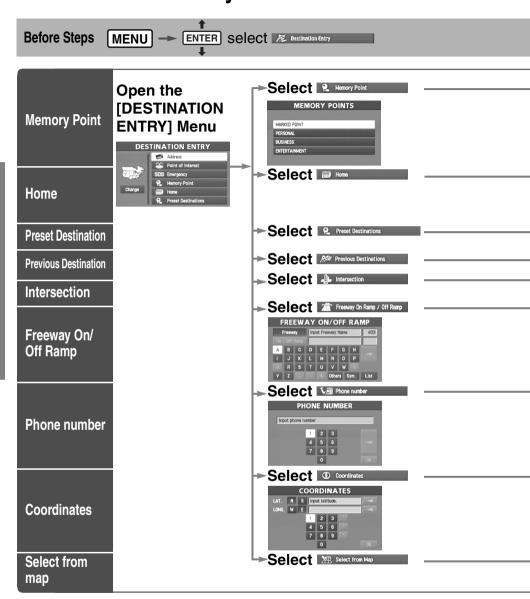
Destination Entry and Route Search

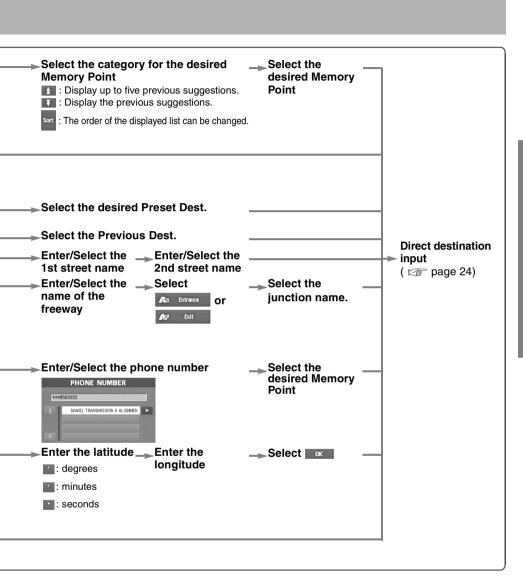




For Character Entry, please refer to page 23.

Destination Entry and Route Search





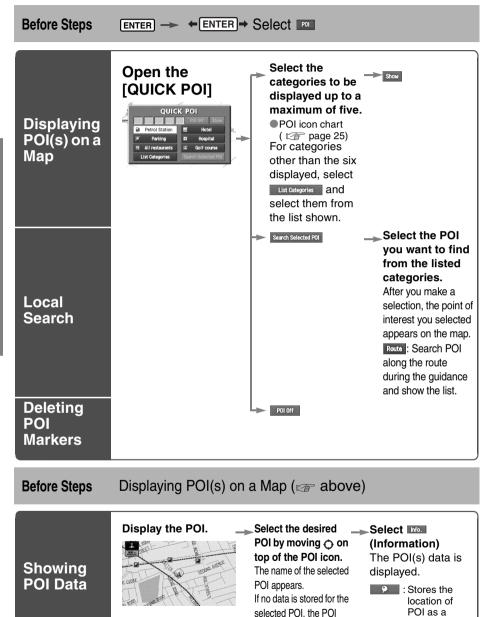
For Character Entry, please refer to page 23.

Use POI

You can select one of the six categories on the menu or List Categories and then select the POI(s) to be displayed on the map.

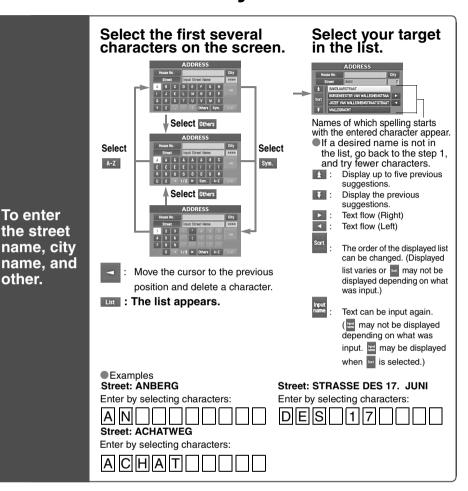
memory

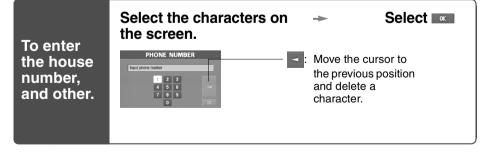
point.



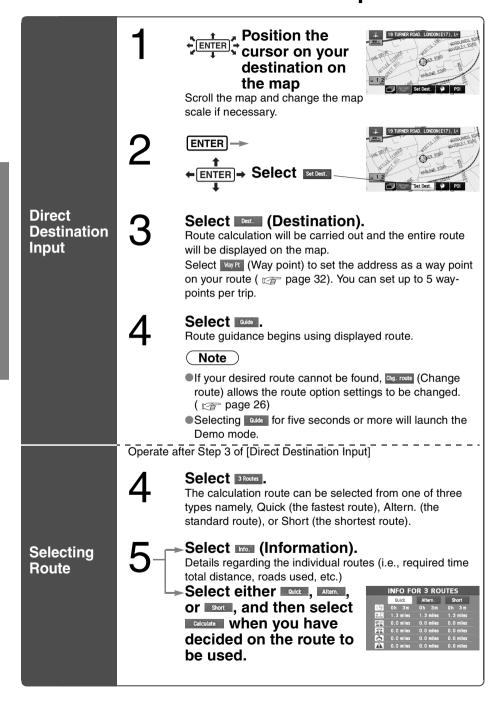
name is not displayed.

Character Entry





Direct Destination Input



Fillings

POI Icons on Maps / Delete Destination

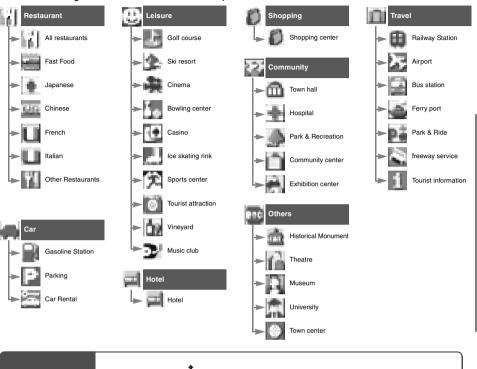
■ POI (Point of Interest) Icons

Delete

destination

The following are POI icons shown on maps.

MENU

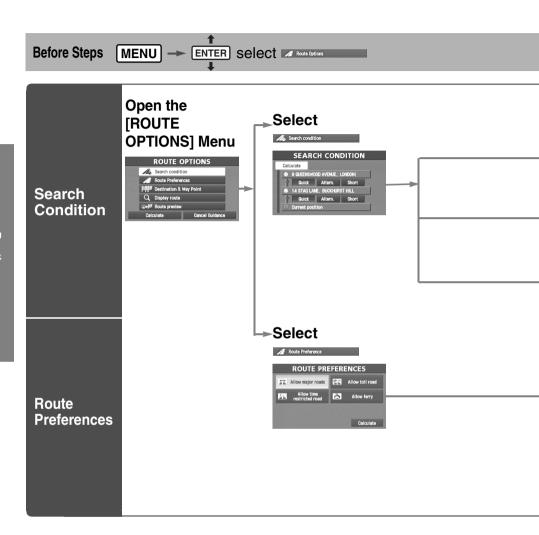


ENTER Select Ø Cancel Guidance

ENTER Select ENTER

Route Options

 During route guidance you can change the route options, stop or check the route.





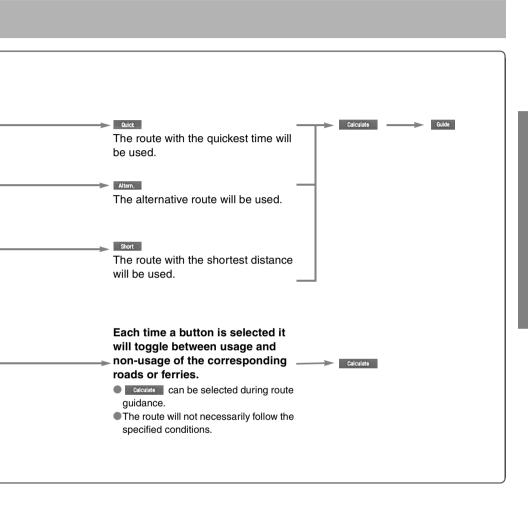
■ Do not keep your eyes fixed on the monitor screen or operate the system while driving

Do not change the settings and destination locations while driving. Minimize the time spent

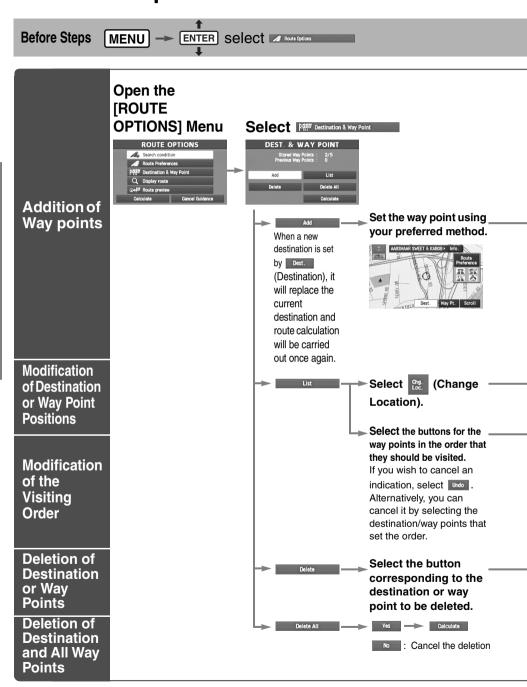
viewing the monitor screen and listening to the voice guidance while driving. Operating the system

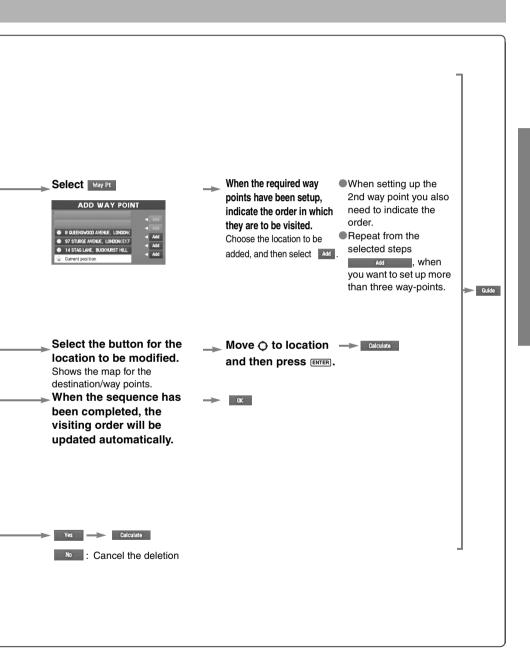
will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop

the vehicle in a safe location and use the parking brake before operating the system.

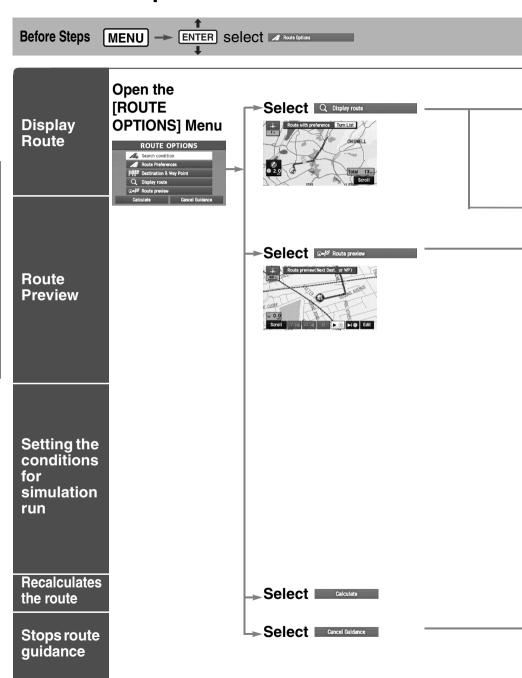


Route Options





Route Options





The Entire Route screen appears.



Enter the map scroll.

Use the buttons displayed on screen to carry out a simulation run.

Scroll: Enter the map scroll.

: Move the start point.

Carry out a simulation run in the direction of the start point. When the run has been started, this button will be displayed as ____, and when selected, it will cause running to take place at high speed.

: Stop the simulation run.

Carry out a simulation run in the direction of the destination. When the run has been started, this button will be displayed as ., and when selected, it will cause running to take place at high speed.

: Move to the destination.

Edit : Displays the EDIT ROUTE PREVIEW screen.



To next Dest. or WP : Stops at the destination or the next way point.

: Stops at a point of interest which has been setup on the route.
: Delete the POI which has been selected.

POIs: Display the six POIs from Quick-POI storage. When one of these is selected,

it will be displayed on the map; furthermore, can be selected to display items other than shown here. For more details, refer to page 43.

If, for example, Restaurant is selected for POIs and a simulation run is started using to next POI. It is will then stop at a restaurant on the route.

If **Info.** is selected here, the system will display information relating to the establishment question.

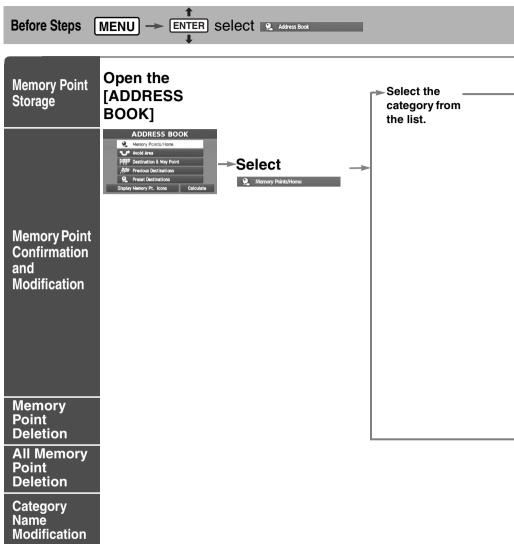
Yes

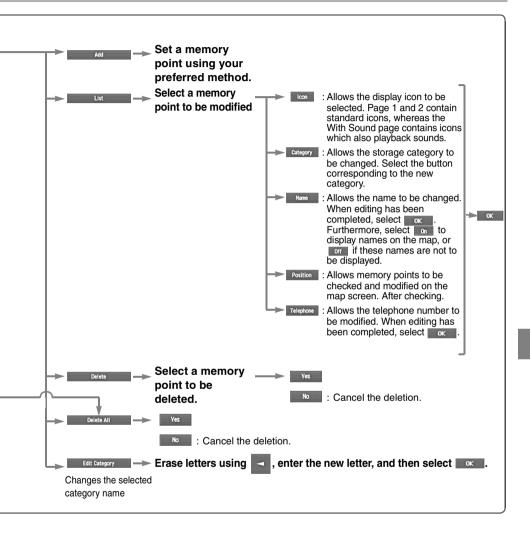
: Cancel the Cancel Guidance.

RET

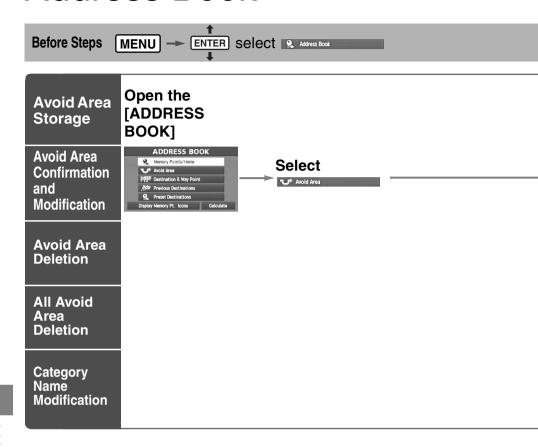
Address Book

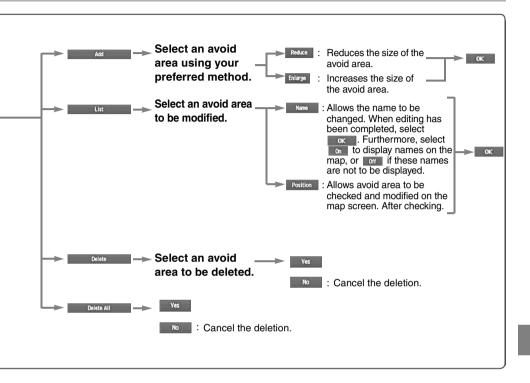
 You can, edit, or delete any destinations, way points, or marked point.



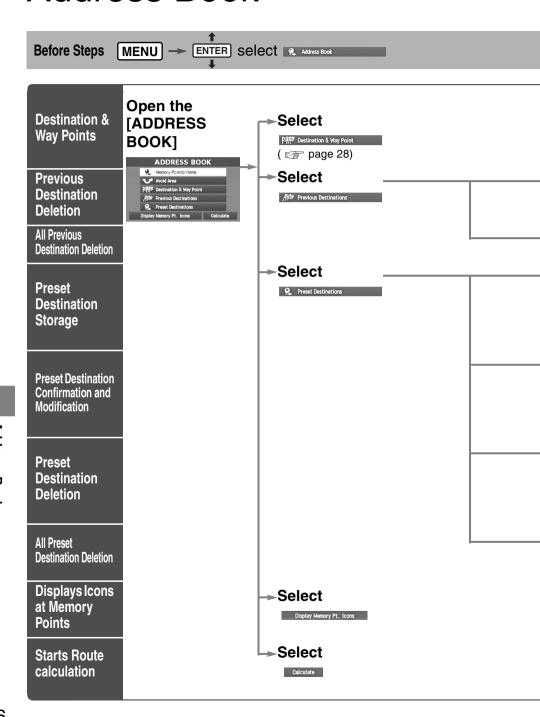


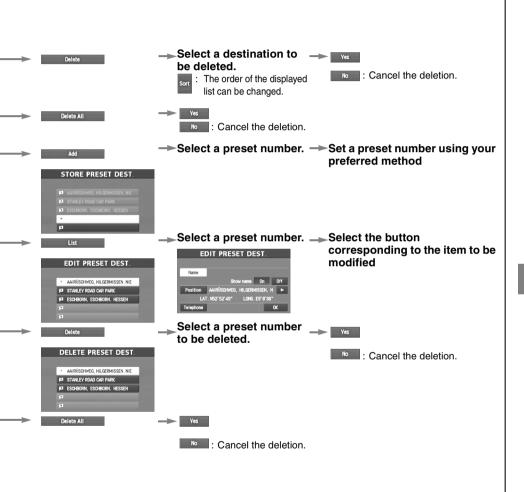
Address Book





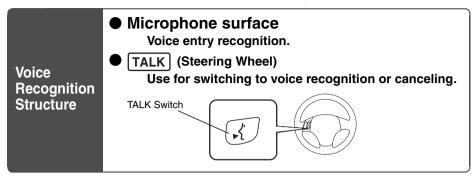
Address Book

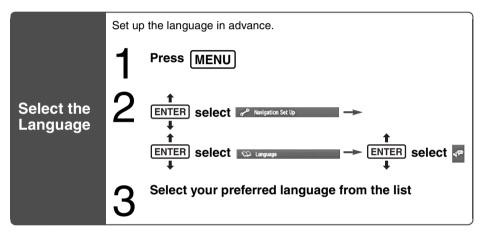


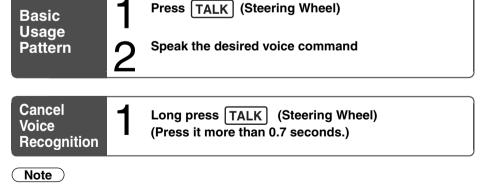


Voice Recognition

■Voice control can be carried out by simply Pressing TALK and using a voice command (
page 39) spoken into the microphone.







After the navigation system has been set, voice recognition needs approximately 2 minutes for activation on preparation. Wait momentarily.

Avoiding Voice Recognition Errors.

Read the notes listed below to allow the Voice Recognition function to recognize your voice properly.

- Speak a voice command clearly.
- Keep yourself in a safe driving position. Do not face or approach the microphone to make a voice command to recognize.
 - Voice recognition may fail to recognize your command due to voice tone. If this happens, change the tone of your voice by speaking more loudly and clearly.
- Keep the inside of the vehicle quiet when making a voice command. Your command may be compromised by noises made by people, blinkers, the horn, vehicle vibration, and noises from outside the vehicle.
- •Use the language you selected in voice recognition.

Voice Recognition Command

The following voice commands can be used with voice control.

The following voice command
Shortcut Commands
[Show] Current (Position/Location)
[Show] Map
Repeat [Voice] [Guidance]
Cancel
Map Operation Commands
Zoom In
Zoom Out
Zoom In Maximum
Zoom Out Maximum
Right Map Zoom In
Right Map Zoom Out
Right Map (Zoom In Maximum/
Minimum Scale)
Right Map (Zoom Out Maximum/Maximum Scale)
[Change to/Show] North up [Mode]
[Change to/Show] Heading up [Mode]
[Change] Map Direction
Right Map [Change to/Show] North up [Mode]
Right Map [Change to/Show] Heading Up [Mode]
Right Map [Change Map] Direction
[Show/Change to] Dual Map [Mode]
[Show/Change to] Single Map [Mode]
(Store/Mark) [This Point]
POI Display Commands
Automobile Club
Gas Station/Gas
Parking/Parking Lot/Parking Garage/Car Park
Auto Service & Maintenance/Auto Service
ATM
Bank
Town Center/City Center
Convention Center/Exhibition Center
Court House
Government Offices
Higher Education/University/College
Hospital
Library
Parks & Recreation/Park & Recreation
Police Station

Amusement Park Casino Golf Course Historical Monument Marina
Golf Course Historical Monument
Historical Monument
Marina
Museum
Ski Resort/Skiing
Sports Complex/Stadium
Performing Arts
Tourist Attraction
Tourist Information
Winery
Restaurant/I'm Hungry/Show Restaurant
American Restaurant/American Food
Chinese Restaurant/Chinese Food
Continental Restaurant/Continental Food
Fast Food/Fast Food Restaurant
French Restaurant/French Food
Italian Restaurant/Italian Food
Japanese Restaurant/Japanese Food
Mexican Restaurant/Mexican Food
Seafood Restaurant/Seafood
Thai Restaurant/Thai Food
Other Restaurant/Other Food
Grocery Store
Shopping Mall
Airport
Bus Station
Ferry Terminal
Hotel
Rental Car Agency
Rest Area
Train Station
Business Facility
POI Off
Destination Operation Commands
[Go] Home
Enter Destination
Add to Waypoint

(Go to/Previous) Starting Point
[Go to] Previous Destination
[Go to] Preset Destination [Number] 1
[Go to] Preset Destination [Number] 2
[Go to] Preset Destination [Number] 3
[Go to] Preset Destination [Number] 4
[Go to] Preset Destination [Number] 5
Cancel
Guidance Commands
Louder
Softer
[Show] (Whole/Entire) Route [Map]
[Show] Next Way Point [Map]
Show First Way Point [Map]
Show Second Way Point [Map]
Show Third Way Point [Map]
Show Fourth Way Point [Map]
Show Fifth Way Point [Map]
Show Destination [Map]
(Delete/Cancel) Next Way Point
Yes
No
(Delete/Cancel) Destination
(Delete/Cancel) All Way Points and
Destination
Voice Guidance Off
Voice Guidance On
Quick
Alternative
Short
Detour
Detour Entire Route
[Change to] Arrow (Guide/Guidance)
[Change to] Turn List (Guide/Guidance)
[Change to] Freeway (Guide/Guidance)
[Change to] Intersection (Guide/Guidance)
Display Commands
display [set] day [mode]
display [set] night [mode]
display [set] auto [mode]

- (): Indicates the commands to be the object of "/"
- []: Recognizes without saying the command in "[]"
- "/": Recognizes when saying either commands before and after "/"

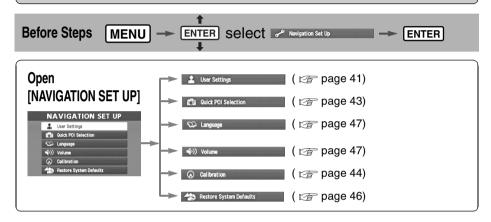
You can alter the map display conditions, the route guidance conditions and show the system information.



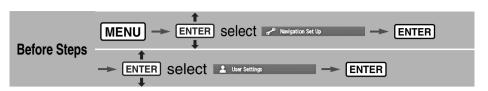
Stop your vehicle before the following operations.

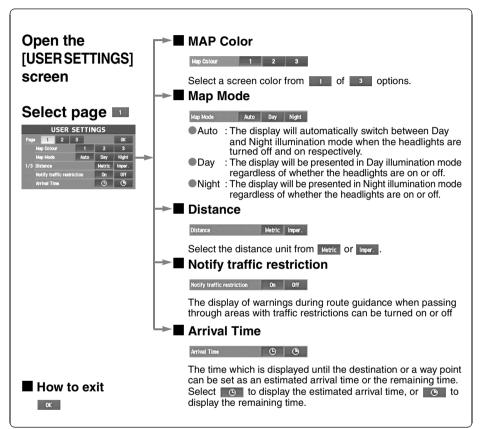
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident.

Always stop the vehicle in a safe location and put the parking brake on before operating the system.



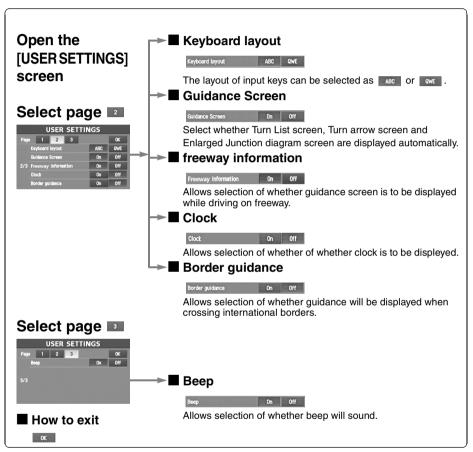
User Setting





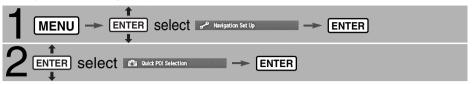


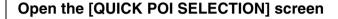




Quick POI Selection

This function allows you set the categories on the area displayed when the (Point of interest) menu is selected on the map. Quick POI enables you store up to six different kinds category which you use most regularly.







Select the button for Quick POI storage.

Note

Select the category to be changed

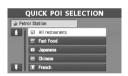
:This button allows you to restore the factory setting.



Select a category.

Once selected, subcategories will be displayed.

List all Categories : Subcategories from all of the individual categories will be displayed together.



Select the subcategories to be displayed on the map.

Repeat the above steps to add further POI markers displayed on the menu.



This function allows you to correct any error in the position or direction of your vehicle display.



Adjusting Current Position and Direction



Open the [Position calibration] screen



Move ♠ to the correct position and select **ENTER**.



Use (or) to adjust the direction in which you are heading, and select

Distance

This function automatically corrects any error in the display of the current position that might occur after tire replacement.



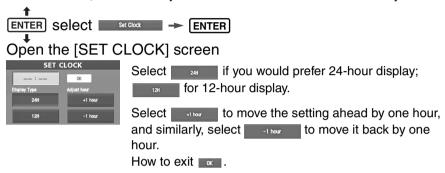
Distance is displayed

You will have to drive about 6 miles (10 km) before distance correction is complete.



Set Clock

The current time is set using this function. Since time notification is provided by a GPS satellite, time-zone adjustment can be carried out automatically.



Map Version

Please have the map and software version numbers available in advance. This information can be found by using the following procedure:

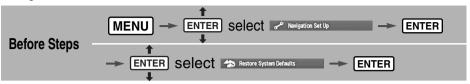


Map and software versions are now displayed.



Restore System Defaults

This function replaces all the settings in the mobile navigation system with the initial default settings.







Select ox.

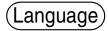
:Restores the average speed setting to the initial value upon factory setting.

If you execute Restore System Defaults, all of your Stored setting data will be deleted.

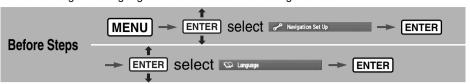
[Default List]

Item	Initial condition
Menu names	
For maps (one screen and dual	North up
screen)	
Map display mode	2D, single-screen display
Map Display scale/Map scale for	Single-screen: 10,000 map (1/16 mi)
Dual-screen is not object of backup.	Dual-screen: 40,000 map (1/4 mi)
Display guidance language	US English (female)
Q-POI map display	All Off
Q-POI Selection	A : Gas station
	B: ATM
	C : Parks
	D : Grocery store
	E : All Restaurant
On a such Association	
Search Area	U9 (including Washington DC)
Map Color	1
Day/Night/Auto Setting	Auto
Distance	Km
Units (Miles/KM) (Global setting)	4 (4) =
Volume Presets	4 (1 to 7)
Right Screen Setting, POI	On
Passage Point Display/Current Location, Map Screen (Time	
Requirement, Time, Direction/	
Distance)	
Time display change (12h/24h)	24h
Keyboard layout	ABC
Right screen settings RDS-TMC	N/A
On-Route Scroll Setting Mode	Next passage point or
	Destination mode
On-Route Scroll Display Items	Unselected
Arrival Time	Time
Passage Point Display/full route	Way points
screen (Time Requirement, Time,	- 1
Direction/Distance)	
Navigation Setup (Clock)	Off
Navigation Setup (Beep)	On
Voice Recognition	
Speech recognition Language	UK English (female)
selection	

Item	Initial condition
Map display	
Map Configuration	Turn List Mode
freeway Information	Off
Navi setting Display Intersection view	ON
RDS-TMC	
RDS-TMC display setting	N/A
DRGS setting (requires	N/A
confirmation on licensing issues)	
Voice guidance setting	N/A
Country selection	N/A
Country setting (country code)	N/A
List of Menu Guidance	
Navigation setting Guidance	20 MPH(30 KPH)
conditions Average speed	
Residential	
Navigation setting Guidance	40 MPH(60 KPH)
conditions Average speed	
Main Road	
Navigation setting Guidance	60 MPH(100 KPH)
conditions Average speed	
freeway	
Allow freeway	On
Navigation setting Route setting	
Allow freeway Allow Toll Road	Off
Navigation setting Route setting	Off
Allow Toll Road	
Allow Ferry	Off
Navigation setting Route setting	Oil
Allow Ferry	
Allow Restricted Road	Off
Navigation setting Route setting	
Allow Restricted Road	
Allow Car Train	On
Navigation setting Route setting	
Allow Car Train	
Notify traffic restrict.	On
Border guidance	OFF



You can change the languege of the menu and the voice guidance.





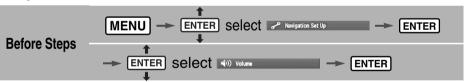


Select your preferred language from the list.

: Select the language when using voice activate. (rapage 38)

Volume Adjustment

This function replaces all the settings in the mobile navigation system with the initial default settings.



Open the [VOLUME] screen



Select the appropriate button to set the volume to between (minimum) and (maximum).

:Sound output will be muted.

Precautions/System Performance

Voice Guidance

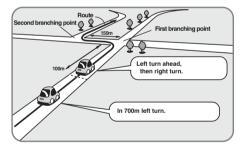


- The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable at times to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.
- Your route may sometimes include roads that are not open to vehicles or are closed due to traffic regulations. Please comply with the local traffic regulations.
- Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

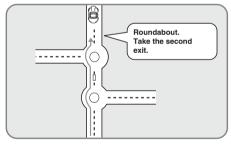
Voice guidance has the following functions:

■ Intersection guidance

- The system voice announces the distance to an upcoming turn and the turning direction.
 - → This guidance function is automatic. Therefore, you do not have to set it, and it cannot be disabled.
- The system vocally announces the distance to an upcoming highway branching point or junction.



When two intersections are close together, the voice guidance may be late.



When two roundabouts are close together, the voice guidance for the second may be late.

GPS



GPS is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Department of Defense. The Mobile Navigation System uses input from three or more satellites and calculates the vehicle position based on the principle of triangulation.

The positioning accuracy of the system corresponds to the error display of the GPS which is from about 30 to 200 meters.

If you are using the system for the first time, or if you have not used it for some time, it takes about 5 minutes (or about 2 minutes in open areas) to calculate your vehicle's position.

■ GPS signal reception is poor in the following places









In tunnels

Among high-rise buildings Under elevated roads

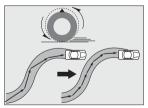
In wooded areas

- The GPS satellites are controlled by the U.S. Defense Department, which may intentionally lower positioning accuracy. In such cases, there may be vehicle position deviations.
- There may be vehicle position deviations for some time until GPS signals are received after turning on the ignition.

Map Matching

This function compares your vehicle's tracking data with the road data on the map disc, applies dead reckoning to determine the road you are driving on, and displays your vehicle on that road on the map.

Intelligent map matching addresses the following problems to achieve high accuracy in vehicle positioning.



Position Correction for Elevated Roads

Position accuracy is improved by detecting if the vehicle is running on or under an elevated road.

Position Correction for Parking Garages

Position accuracy is improved by detecting if the vehicle is driving in an elevated or underground parking garage.

High-precision Gyrosensor

A gyro detects turns with an accuracy of 0.05° per second. Combined with a speed sensor, it enables the system to display the current vehicle position even where GPS signals may be blocked.

- Using a spare tire in place of the regular one may cause vehicle position deviations.
- Any difference between the direction which your vehicle actually travels and that shown on the map is automatically eliminated by azimuth correction.

Precautions/System Performance

Positioning Accuracy

In the following situations, your vehicle position may not be displayed correctly on the map. But, as you keep driving, your vehicle position will be automatically corrected utilizing map matching and GPS data.



Running on an elevated road



Making a turn after driving on a long straight road



Running on a steep mountain road





Running on a spiral Entering an intersection where a road branches off at a small angle



Running on gridiron Running on a lavout of roads



slippery road with tire chains



Snaking on a wide



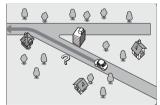
When your vehicle is on a turntable with the ignition turned off



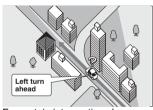
After getting off a ferryboat or vehicle train

Route Guide

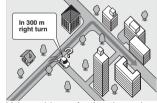
Although you may encounter the following problems in route guide, there is nothing wrong with the system.



For certain intersection shapes, the upcoming turn or the name of the intersection may not be announced.



For certain intersection shapes, you may be prompted to turn right or left When you should actually stay on the same road.



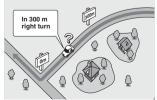
Voice guidance for the planned route may continue even after you have deviated from that route such as having turned too early.



Some points where the road divides on highways or toll roads may not be displayed or announced.



The Intersection Zoom Map may not always agree with the actual shape of the intersection.



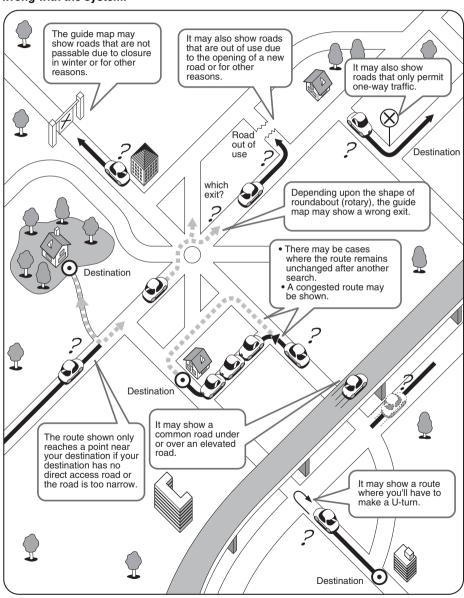
The announced distance to an upcoming turn may differ slightly from reality.



The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.

Route Search

Although you may encounter the following problems in a route search, there is nothing wrong with the system.



Troubleshooting

Verification First

Note

There may be some problems due to operational errors or mistakes. Please read this manual again and verify that there really is a problem before calling an Expert repairer, we recommend an Authorized Mazda Repairer to ask for repair services.

Symptom Check point No picture Check if a fuse has been blown. Consult an Expert repairer, we recommend an Authorized Mazda Repairer. Check if the voltage level of the vehicle battery is low. Recharge the battery or change batteries. Display doesn't open or close Check if the vehicle position changed when ACC was set to OFF. When, for example, The vehicle • The vehicle was transported by a ferry boat. The vehicle was rotated on a turn table in a parking lot. position is not The vehicle was transported by a tow track or other such correct vehicle. → Drive the vehicle for a while where you are receiving GPS signals.

Symptom Check point No GPS •GPS signals may not be received because of obstructions. symbols are After moving the vehicle away from obstructions, the GPS signals can be received. displayed The vehicle Check if the mode is set to the current position screen. position is not ⇒ Press POS displayed Check if the volume control for the voice guidance has been turned off. Check if the vehicle is off the route. ⇒ Repeat the route search while checking the route guide No voice quidance Check if you are driving the vehicle in the wrong direction on the route. ⇒ Repeat the route search checking the direction of the destination.

Buttons in the remote control do not beep

●Check if [Beep] is set to [Off] (☞ page 42).

Troubleshooting

Error Messages

Error message

The disc installed is not a MAP DVD.



error, due to overheating. For more information please consult your **Navigation** Owner's Manual.

MAP DVD read

Solution

- The disc is not installed or the incorrect disk is installed.
 - → Check if the disk is installed. If installed, check if the installed disk is correct.
- The disc is wet, dirty, scratched, or upside down, or the disc cannot be played with this unit.
 - ⇒ Eject the disc and check it.

- The disk is overheated.
 - → Check if there are heat absorbing objects around the main unit.



Maintenance

Care of the Product

■ Cleaning this product

Use a dry, soft cloth to wipe it.

■ Cautions for cleaning

Never use solvents such as benzene and thinners, they could mar the surface of the unit.

■ Map disc

If you require the latest map disc, consult an Expert repairer, we recommend an Authorized Mazda Repairer.

Handling and Care of Map Discs

■ How to hold the disc

- Do not touch the underside of the disc.
- Do not scratch the disc.
- Do not bend the disc.
- When not in use, keep the disc in the case.

■ Disc Cleaning

•Use a dry, soft cloth to wipe from the center outward.



Label side





■ Do not leave discs in the following places:

- Direct sunlight
- Near car heaters
- In dirty, dusty and damp areas
- On seats and dashboards